

Night Vision (NV) Image Intensification (I2) System



Aviator's Night Vision Imaging System
Heads-up Display (ANVIS/HUD)



AN/PVS-7D Night Vision Goggle



AN/PVS-10 Night Vision Sniper Night Sight



Target Location & Observation System (TLOS)

MISSION

Provide a family of several different night vision image intensifier systems to enable soldiers to operate more effectively and safely in day or night and under degraded battlefield conditions.

DESCRIPTION AND SPECIFICATIONS

Night Vision (NV) Image Intensification (I2) systems include the following: The **AN/AVS-6 Aviator's Night Vision Imaging System (ANVIS)** provides image intensification that enables helicopter crew members to conduct night missions under minimal ambient light conditions. It is powered by existing aircraft power, a helmet-mounted battery pack, or a clip-on power supply.

The **AN/AVS-7 Aviator's Night Vision Imaging System Heads-Up Display** provides aviators with flight information superimposed on the visual image of the ANVIS. The system is electro-optical and provides the pilot and copilot critical, real-time, high-resolution flight and navigational information.

The **AN/PVS-7D Night Vision Goggle** is a lightweight, biocular goggle. It uses a single passive third-generation image intensifier tube. The goggle is used in combat, combat support, and combat service support operations.

The **AN/PVS-14 Monocular Night Vision Device** provides leaders of combat infantry units with a small, lightweight, night vision device for use in observation and command and control. It interfaces with the AN/PVS-7D head and helmet mount and the 3X magnifier.

The **AN/PVS-10 Night Vision Sniper Night Sight** is an integrated day/night sight for the M24 sniper rifle. It enables the sniper to acquire and engage targets during low and high ambient light conditions. The system mounts on the M24 and uses the same mil-dot reticle as the existing Leopold day scope. Magnification for day and night operation is 8.5X, and the system's maximum weight is 4.9 lb.

The **AN/TVS-5A** is a long-range night vision sight used with the MK-19 grenade launcher and the M2 machine gun. The sight provides a magnification of 5.8X, a field of view of 9.2 degrees, and employs an adjustable mounting bracket that corrects for trajectory and/or windage, depending on the weapon. The current upgrade program improves operational range by replacing the TVS-5 second-generation image intensifier tube with a third-generation tube, reducing operator fatigue with the use of a biocular viewer.

The **Lightweight Video Reconnaissance System (LVRS)** consists of a man-portable outstation and a vehicle-mounted base station. The outstation is used by surveillance or reconnaissance teams to capture, compress, and transmit still-frame images over military radios to a base station located at a higher echelon.

The **Target Location and Observation System (TLOS)** is a lightweight, self-contained, image-intensified day/night sight that employs a near-infrared low-energy laser to actively acquire direct view and electro-optic targets.

FOREIGN COUNTERPART

I2, laser, and thermal devices are produced in many countries.

FOREIGN MILITARY SALES

AN/AVS-6(V)1 and 2: Bahrain, Colombia, Greece, Jordan, Mexico, Saudi Arabia, Taiwan, Thailand, United Arab Emirates; AN/PVS-7: Italy, Kuwait, Mexico, Portugal, Saudi Arabia, Taiwan; AN/PVS-7D: Bahrain; ANVIS/HUD: Israel.

PROGRAM STATUS

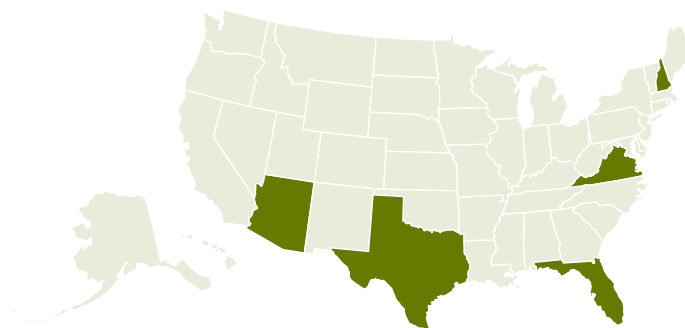
- **FY99** Completed basic heads up display (HUD) fielding.
- **1QFY99** LVRS first unit equipped at Ft. Bragg, NC.
- **2QFY99** Completed TLOS deliveries; first unit equipped (FUE).
- **3-4QFY99** Test new LVRS outstation.
- **Current** Field AN/TVS-5A; Fielding AN/PVS-7D and AN/PVS-14 to Interim Brigade Combat Team.

PROJECTED ACTIVITIES

- **1-2QFY01** Operational testing of TVS-5A system, with adjustable sight bracket, biocular viewer, rail grabber, and GEN III tube.
- **2QFY01** First delivery of gated/filmless image intensifier for AN/PVS-7D.
- **2-3QFY01** FUE/Initiate execution of fielding schedule; Complete advanced HUD retrofit.

PRIME CONTRACTORS

International Telephone and Telegraph (ITT) (Roanoke, VA); BAE Systems (Austin, TX); Litton (Garland, TX; Tempe, AZ); Lockheed Martin (Orlando, FL; Nashua NH)



* See appendix for list of subcontractors

